

ABSTRACT

a ^{An} The present invention relates to an apparatus for disinfecting and removing standing water from the hydraulic plumbing system that circulates water in a whirlpool bath. The apparatus includes a pneumatic pump fluidically coupled to the whirlpool hydraulic plumbing system of a whirlpool bathtub, such that air pressure from the pneumatic pump can be used to flush standing water out of the hydraulic plumbing after each use of the whirlpool bathtub. An ozone generator is pneumatically connected to the pneumatic pump, such that the air circulated by the pump is enriched with ozone or ozonated. The pneumatic plumbing connecting the pneumatic pump to the hydraulic plumbing system is positioned substantially above the maximum water level allowed in the tub and also substantially above the hydraulic plumbing system. The pneumatic plumbing is connected in fluidic communication with different portions of the hydraulic plumbing, such that activation of the pneumatic pump (after the tub has been substantially drained) blows ozonated air through the hydraulic plumbing, disinfecting and forcing residual water from the whirlpool hydraulic plumbing system into the bathtub, where it can be conventionally drained. The ozonated air from the pneumatic plumbing also acts to disinfect the interior of the pneumatic and hydraulic plumbing systems, as well as purifying the air exhausted from the system.